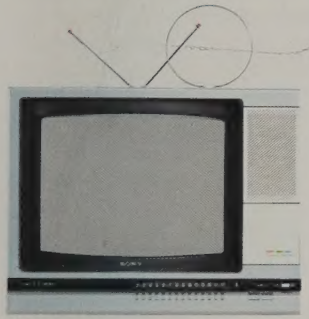
SONY®

## TRINITRON® COLOR TV RECEIVER

# KV-1714



## OPERATING INSTRUCTIONS

### OWNER'S RECORD

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. KV-1714 Serial No. _____

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Congratulations on choosing this advanced Sony Color TV Receiver. For best results, please read this manual thoroughly before operating the set, and keep these instructions handy for future reference.

## WARNING

To prevent fire or shock hazard, do not expose the set to rain or moisture.

Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

# PRECAUTIONS

- Operate only on 120V ac.
- This set is equipped with a polarized AC power cord plug (one blade of the plug is wider than the other), which will fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should the plug still fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the set on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the set in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Unplug the set from the wall outlet if it is not to be used for an extended period of time.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your set for repairs or to a new location. For maximum protection, repack your set as it was originally packed at the factory.
- To keep the set looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers, since these will damage the cabinet. As a safety precaution, unplug the set before cleaning it.

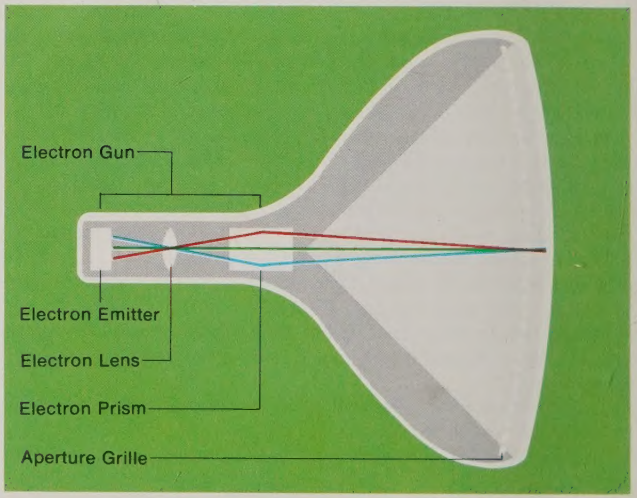
For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS" included with this manual in the vinyl bag.

# TRINITRON SYSTEM

Your Sony Color TV employs the latest concept in color-image reproduction...the TRINITRON System. A product of intensive engineering research, the TRINITRON System ensures bright, sharp pictures and few service requirements.

The system consists of the TRINITRON Gun and "Aperture Grille". The TRINITRON Gun produces the three beams that excite the primary phosphors on the screen. The beams are aimed and focussed by a unique set of electron lenses and a pair of electron prisms. Pictures stay sharp at all points on the screen because all three beams pass through the center of a large lens. The Aperture Grille color-selection system allows a larger amount of electrons to pass through it to provide high brightness on the screen.

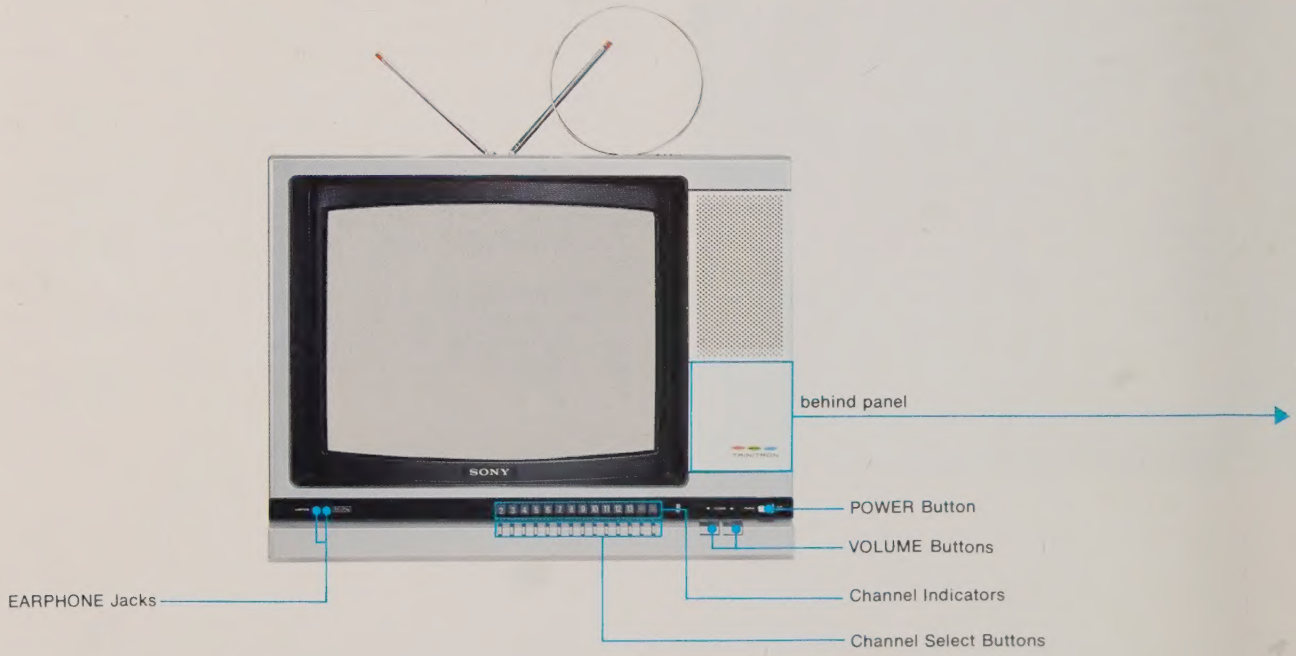
"Guard Grille", a series of non-reflecting vertical stripes that alternate with the phosphor color stripes, absorbs ambient light reflections. Moreover, this TV employs newly developed phosphors. The result is a high-contrast, brighter picture with no increase in energy consumption.

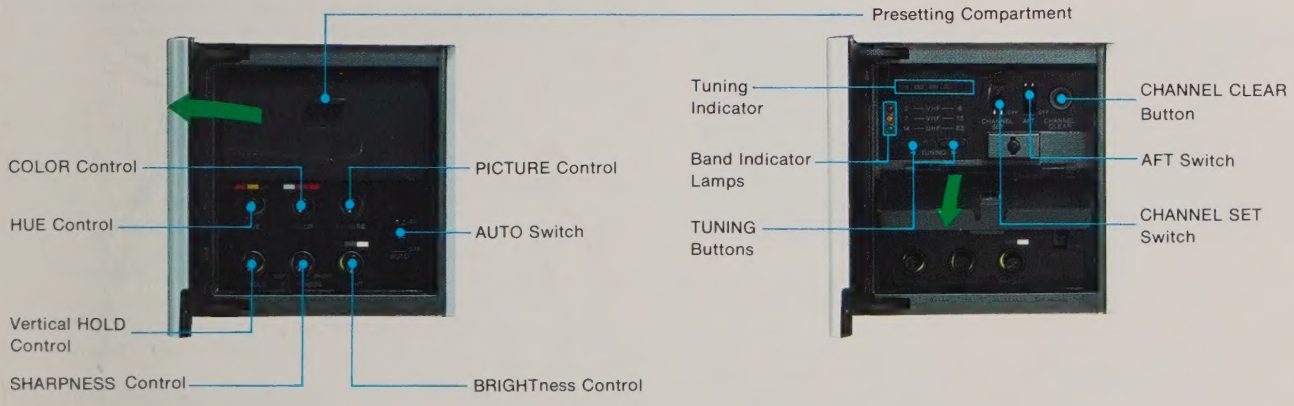


# FEATURES

- The semi-automatic program search system permits easy preset tuning of up to 14 channels; VHF, UHF or inactive channels (for monitoring the playback of a video tape recorder.
- Advanced new automatic circuits are built into your TV to eliminate the necessity for frequent readjustment of the tuning and color controls. A touch of the AFT Switch instantly activates these circuits to tune your set for peak performance. A touch of the AUTO Switch locks the color processing system to factory preset values that assure realistic reproduction of every shade and tint.
- Your Sony Color TV features the ECONOQUICK system which provides a picture only a few seconds after the set is switched on. Unlike conventional instant-picture systems, there is absolutely no power consumption at the picture tube for this feature when the set is not in use.

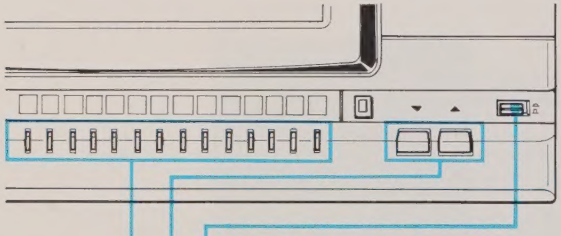
# LOCATION OF CONTROLS




Presetting Compartment
COLOR Control
PICTURE Control
HUE Control
AUTO Switch
Vertical HOLD Control
SHARPNESS Control
BRIGHTness Control
Tuning Indicator
Band Indicator Lamps
TUNING Buttons
CHANNEL CLEAR Button
AFT Switch
CHANNEL SET Switch

# OPERATION

Operate the controls in the numbered sequence for proper operation. The Channel Select Buttons marked 2–13 are preadjusted at the factory to VHF channels 2–13. To reset the channels, see pages 11–16.



1. Press the POWER Button.
   • The picture will appear in a few seconds.
   To switch off, press the button again.

2. Press the Channel Select Button which has been preset to the desired channel.

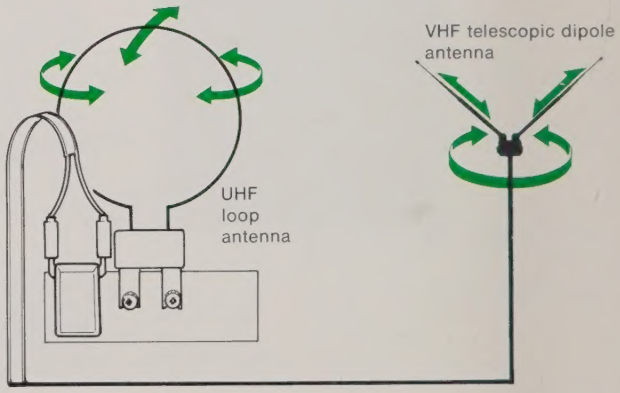
3. To increase the sound volume, keep the VOLUME ▲ Button depressed.
   To decrease, keep the VOLUME ▼ Button depressed.

• The channel and sound volume selected just before the POWER Button is set to OFF will be memorized.

**Indoor antenna adjustment**

For VHF reception, use the VHF telescopic dipole antenna; adjust the length, direction and angle of both elements symmetrically for the best possible picture.

For UHF reception, raise the UHF loop antenna. Swing the loop back and forth and/or sideways until the best available picture is obtained.




When an outdoor antenna is to be used, refer to page 18.

**Automatic picture adjustment**

Set the AFT Switch to ON. The AFT (Automatic Fine Tuning) locks in the correct signal and secures a sharp picture. Set the AUTO Switch to ON. The AUTO color circuit locks onto preset levels of hue and color to provide correct reproduction.

**Brightness and contrast adjustment**

Correct brightness and contrast settings are important for good color reproduction.

Perform the initial adjustments as follows:

❶ Turn the PICTURE Control fully counterclockwise.

❷ Adjust the BRIGHTness Control so that the darkest parts of the picture are seen as black.

❸ Turn the PICTURE Control from the lowest setting to the desired level according to your preference and room lighting conditions.

The PICTURE Control will adjust the contrast, color intensity and brightness simultaneously in the proper ratio.

A center detent position that provides a setting suitable for average use is incorporated in this control.

**Manual color and hue adjustment**

Both COLOR and HUE Controls have a limited adjustment range in the AUTO mode. If you wish to control color reproduction manually, set the AUTO Switch to OFF to disengage the automatic color mode.

Adjust the COLOR Control for the desired color intensity.

Picture becomes pale.

Picture becomes vivid.

Adjust the HUE Control for the most natural skin tones.

Skin tones become purplish.

Skin tones become greenish.

• COLOR and HUE adjustments have no effect upon black and white programs.

**Sharpness Control**
Turn the SHARPNESS Control clockwise for maximum sharpness. Turn the control counterclockwise for a softer picture. If reception conditions cause a snowy picture, more pleasing results will be obtained with a softer picture.

**Vertical hold control**
If the picture rolls vertically, adjust the V HOLD Control.

**Earphone jacks**
For private listening, insert the earphone plug into the [ • ] receptacle. This disconnects the loudspeaker. The use of the [ •• ] receptacle permits the earphone and the loudspeaker to be used simultaneously. TV sound may be recorded by connecting a tape recorder to the [ •• ] receptacle with a suitable connecting cord. Adjust the TV volume for a normal listening level.

# INTRODUCTION TO CHANNEL PRESETTING

Your Sony color TV employs an advanced electronic tuning system that is capable of receiving up to 14 preselected television channels or other program sources such as a connected cable TV system or video tape recorder.

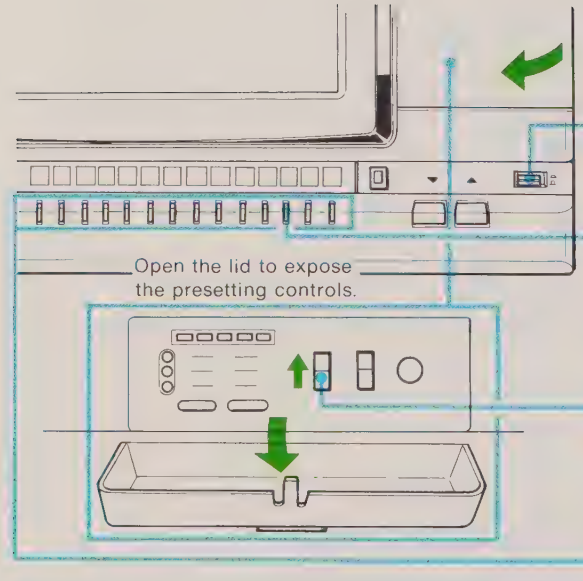
As you receive your Sony TV from the dealer, it has been factory-preadjusted to receive VHF channels 2 through 13 by simply pressing the button on the set's panel having the number corresponding to the channel number. Thus to receive channel 2, press button number 2; to receive channel 7 or 13, press button 7 or 13, etc.

Because of the geographical distribution of VHF stations in the U.S.A., there will probably be some pushbuttons in the 2-13 range that will not provide reception at your location, with the result that several of these pushbuttons will be unusable for the time being. In addition, you will probably wish to receive several of the locally available UHF channels, and possibly to make provision for cable TV or a video tape recorder.

If you wish to preset the UHF channels or other source on the unused positions (page 11), or if you wish to arrange the VHF and UHF channels in numerical sequence or your desired sequence (page 14), perform channel presetting by following one of the two suggested procedures.

### Ⓐ TO PRESET UHF CHANNELS OR OTHER SOURCE ON THE PRESENTLY UNUSED POSITIONS

By using the factory preset 2-13 pushbuttons, you have been able to determine which VHF stations provide good reception. From the local newspaper, or your neighbors, or another TV set, you can determine which UHF stations provide satisfactory reception in your locality.



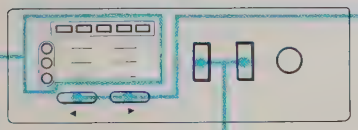

1 Press the POWER Button.

2 For UHF reception press the highest numbered active VHF Channel Select Button.
For presetting of other source (a VTR etc.) press the VHF Channel Select Button whose number is closest to the channel number to be preset.

3 Set the CHANNEL SET Switch to ON.
- The position of the AFT Switch does not matter.

4 Press the Channel Select Button to be preset.

- You may use the right-most two buttons marked with asterisks (At the factory any memory has been erased on these two buttons.) or the unused position among the factory-preset VHF channels.
- **The Channel Indicator will illuminate and the STATION YOU HAVE SELECTED IN STEP 2 WILL APPEAR.**



5 Referring to the picture selected in step 2 press the TUNING ▶ Button for locating higher numbered channels or ◀ Button for locating lower numbered channels (do not hold the button in, just press it momentarily). Allow 1 or 2 seconds for the picture to stabilize.

6 Repeat step 5 as required until your desired station is received.
Use the Band Indicator Lamps and Tuning Indicator as guides.
• In strong signal areas, tuning may sometimes stop between channels.
If your desired station cannot be received, press the TUNING Button again.

7 Repeat steps 4 5 6 until all desired available TV stations have been pre-selected. (If you wish to rearrange your channel positions, refer to the next paragraph.)

8 Set the CHANNEL SET Switch to OFF and make sure the AFT Switch is now set to ON.

Ex. UHF Channel 41

**Tuning Indicator and Band Indicator Lamps**
The red lamp when lit shows you are in the band including channels 2 through 6, the yellow lamp when lit shows you are in the band including channels 7 through 13, and the green lamp when lit shows you are in the band including channels 14 through 83. Within each of these bands, the multi-segment Tuning Indicator will show in what portion of the band you are tuned to at any given moment, with the left-most segment indicating the lowest frequency within each band, and the right-most segment indicating the highest frequency within each band.

After the presetting has been completed, replace the Channel Indicating Segments to correspond to your presetting (see page 15) and close the presetting compartment lid.

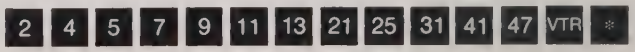
- If there is a VTR position to be included, refer to page 16.
- To use your TV set with a cable television system, contact a representative of the cable company for instructions regarding channel selection. In most cases, this adjustment will be made by the cable company at the time of installation.

**(B) TO ARRANGE THE ACTIVE VHF and UHF CHANNELS IN NUMERICAL SEQUENCE OR YOUR DESIRED SEQUENCE**

Any push button can be set to any frequency from below channel 2 to the highest UHF TV frequency.

❶ Make a list of your receivable VHF and UHF stations or some other source and list them as shown in the following example.
VHF: Channels 2, 4, 5, 7, 9, 11 and 13
UHF: Channels 21, 25, 31, 41 and 47

❷ Having made such a list, remove the Channel Indicator Sheet and insert numbers to correspond to your list, as shown on page 14. You are now ready to preset the Channel Select Button to correspond to your selection of stations.

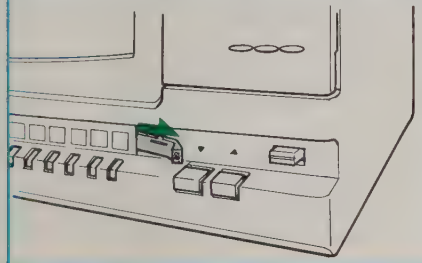



❸ Press the POWER Button.
❹ Set the CHANNEL SET Switch to ON.
❺ Press the Channel Select Button to be preset.
**THE STATION SELECTED JUST BEFORE THE CHANNEL SET SWITCH HAS BEEN SET TO "ON" WILL APPEAR.**
❻ Perform steps ❺ and ❻ previously described in the case (A).

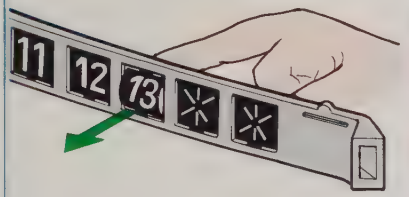
Also before tuning in the desired station, you may use the CHANNEL CLEAR Button whose function is to erase any memory on the depressed Channel Select Button, and position its tuning to a frequency below channel 2. Then use the ▶ Button to locate your desired channel.

**To replace the number indicating segments**

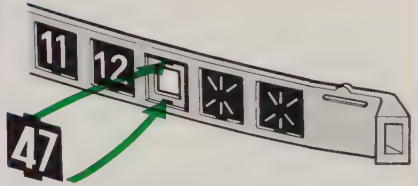
❶ Remove the Channel Indicator Sheet.



❷ Press the segment out from the rear.




❸ Install the correct number segment.




❹ Replace the sheet in the original position.

**To fine-tune the channel manually**

In case of extreme interference, or of an extremely weak station, adjust the fine tuning manually as follows.

Check that the CHANNEL SET Switch is set to OFF, set the AFT Switch to OFF and keep the TUNING ▶ or ◀ Button depressed until a clear picture is obtained. Refer to the following chart.
When the fine tuning is completed, close the presetting compartment lid with the AFT Switch set to OFF.

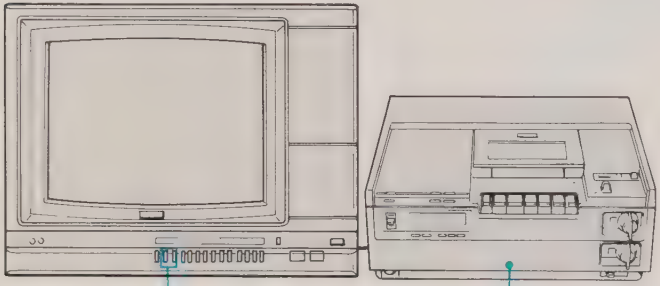
Adjacent TV station — No picture — Blurred No color — Clear picture — Herringbone pattern — Distorted — No picture — Adjacent TV station

Press the ▶ Button.

Press the ◀ Button.

**To preset for VTR playback**

To view the playback picture from a Sony Betamax videocassette recorder (or other VTR) equipped with an RF output terminal, connect a VHF antenna to the recorder (not to the TV) and then connect the VHF (or RF) OUT terminal of the recorder to the VHF antenna terminal of the TV.



At the factory, the second button from the left is preadjusted to the VHF channel 3 and the third button to the VHF channel 4. One of these channels, 3 or 4 is locally inactive and may be used to view the VTR playback picture.

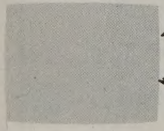
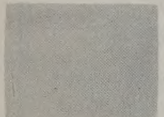
Sony Betamax videocassette recorder.

If you wish to preset some other position to receive the signals from the recorder, complete the connections and proceed as follows.

❶ Set the recorder to the playback mode.
The signal from the recorder will be fed to the TV.
❷ Set the CHANNEL SET Switch to ON.
❸ Press the Channel Select Button to be preset for viewing the playback picture.
❹ Press the CHANNEL CLEAR Button.
❺ Press the TUNING ▶ Button until VHF channel 3 or 4 (the operating channel of the rf unit built into the recorder) is received, whereupon a clear picture will be obtained.
❻ Set the CHANNEL SET Switch to OFF.

# CHECKING THE SET BY YOURSELF

Many apparent malfunctions may be caused by slight misadjustments of the regular controls or some other equally simple cause. If any difficulty arises in the operation of your set, first check through this illustrated list of symptoms and corrections.
Should the difficulty persist, unplug the set and contact your Sony dealer.

| SYMPTOM | CORRECTION |
|---|---|
|  **no picture (screen not lit), no sound** | • Plug the set into a working outlet. |
|  **no picture (screen not lit), but good sound** | • Turn the BRIGHTness or PICTURE Control clockwise. |
| **good picture but no sound** | • Depress the VOLUME [ ▲ ] Button.<br>• Check that the earphone is disconnected from the [ · ] earphone jack. |
| **no picture, no sound, but snow and noise only** | • Connect the antenna properly.<br>• Check the outdoor antenna. |

| SYMPTOM | CORRECTION |
|---|---|
| **no color** | • Set the AUTO switch to ON.<br>• Set the AFT switch to ON.<br>• Turn the COLOR control clockwise. |
| **herringbone pattern, stripes, no color, no picture, too indistinct, etc.** | • Set the AFT Switch to OFF and adjust the fine tuning with the TUNING ▶ or ◀ Button. |
| **dotted lines or stripes** | • Often caused by interference from autos, neon signs, hair dryers, electric razors, etc. Try adjusting the antenna for minimum interference. |
| **double images or "ghosts"** | • Readjust the indoor antenna. Reflections from nearby mountains or buildings often cause this problem. In such cases, a highly directional outdoor antenna may improve the picture. |

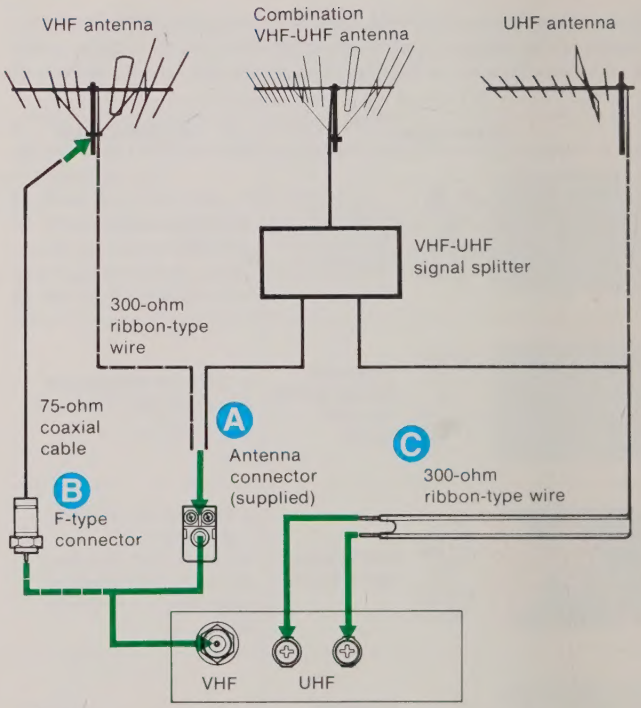
# EXTERNAL ANTENNA CONNECTION

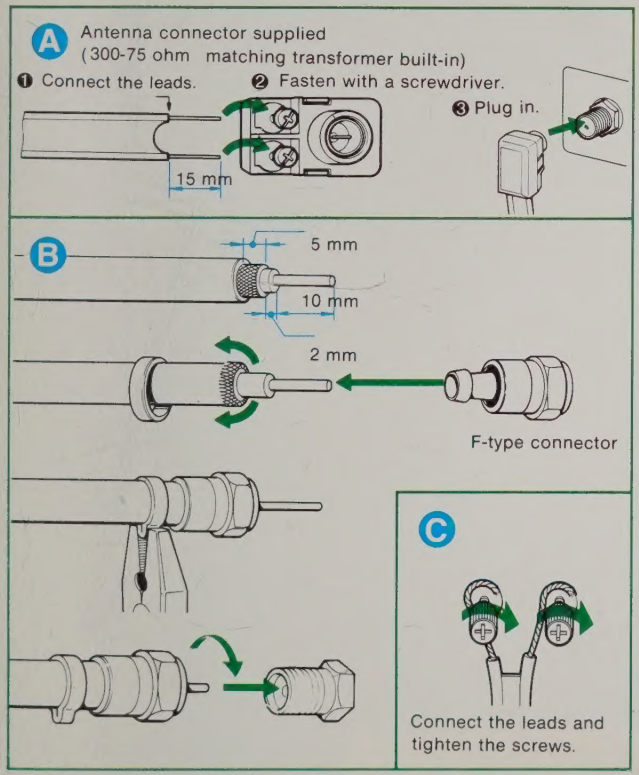
In difficult reception areas (inside steel-frame buildings, in mountainous areas, or at great distances from the transmitter), the use of an external antenna will give better reception.
VHF and UHF antennas with separate lead-in wires, or a combination VHF-UHF antenna with a single lead-in wire may be used.
When a combination VHF-UHF antenna is in use, the signals separated by a VHF-UHF signal splitter, are fed to the VHF and UHF terminals of the TV respectively.

**Connection to the VHF antenna terminal**
Pull out the Antenna Connector from the VHF Antenna Terminal, thus, disconnecting the VHF telescopic dipole antenna.
When using a 300-ohm ribbon-type lead-in, connect the leads to the Antenna Connector, previously attached to the leads from the VHF indoor antenna, and then connect the Antenna Connector to the VHF Antenna Terminal. —— Ⓐ
When using a 75-ohm coaxial cable lead-in from the antenna, connect it to the VHF Antenna Terminal with an F-type connector (optional). —— Ⓑ

**Connection to the UHF antenna terminals**
Loosen the nuts on the UHF Antenna Terminals, pull out the lugs of the UHF loop antenna, then connect a 300-ohm ribbon-type lead-in wire to the UHF Antenna Terminals. —— Ⓒ

**Note:** When playing back a recorded tape from a video tape recorder, connect a suitable antenna to the recorder, and connect the VHF antenna terminal of the TV to the VHF (or RF) OUT terminal of the recorder. For details, refer to the operating instructions furnished with the recorder.

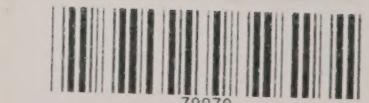





# SPECIFICATIONS

| | |
|---|---|
| Television system | American TV standards |
| Channel coverage | VHF channels 2 – 13 } a total of up to 14<br>UHF channels 14 – 83 } preselected channels |
| Picture tube | Trinitron tube<br>17-inch picture measured diagonally<br>90-degree deflection |
| Antenna | VHF telescopic dipole antenna<br>UHF loop antenna<br>75-ohm VHF external antenna terminal<br>300-ohm UHF external antenna terminals |
| Speaker | 10 cm (4 inches) dia. |
| Power requirements | 120 V ac, 60 Hz |
| Power consumption | 107 W (max.) 69 W (average) |
| Dimensions | approx. 564 × 452 × 466 mm (w/h/d)<br>(22¼ × 17⅞ × 18⅜ inches) |
| Weight | approx. 24.5 kg (54 lb) |
| Accessories supplied | Earphone<br>Channel number segments |

Design and specifications are subject to change without notice.

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